



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/978,236

10/16/2001

Frederick J. Kiko

01B-2049

4072

22447

7590

12/14/2004

DAVIS CHIN

10281 WEST LINCOLN HIGHWAY

FRANKFORT, IL 60423

EXAMINER

PHAM, TUAN

ART UNIT

PAPER NUMBER

2643

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/978,236	Applicant(s) KIKO ET AL.	
	Examiner TUAN A PHAM	Art Unit 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-14, 16 and 21-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The amendment filed on 03-04-2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C.132 states that no amendment shall introduce new matter into the disclosure of the invention. The newly added subject matter of "asymmetric interconnection" to independent claims 10 and 29 is considered new matter because the specification as originally filed does not provide support for such limitation.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

2. Claims 10-16, and 29-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The newly added subject matter of "asymmetric interconnection" to independent claims 10 and 29 is considered new matter because the specification as originally filed does not provide support for such limitation.

Response to Arguments

3. Applicant's arguments with respect to claims 10-16, 21-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10, 16, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Bingel et al. (U.S. Patent No.: 6,028,919, hereinafter, "Bingel").

Regarding claims 10 and 29, Bingel teaches a unitized T1E1.4 compliant filter and splitter circuit used in telecommunication systems for interconnecting between incoming telephone lines and a subscriber's termination equipment located at a subscriber's premises for blocking DSL signals so as to mitigate interference between DSL devices and the subscriber's termination equipment, and communicate the DSL signals to a device capable of utilizing them, the compliant filter and splitter circuit comprising (see figure 4, POTS filter 10, DPF 44, col.4, ln.40-50, col.6, ln.43-53):

a low-pass filter section formed of first and second inductors and a first capacitor (see figure 6, low pass filter 12', first inductor L1, second inductor L2, first capacitor C6, col.6, ln.9-15);

the first inductor having a first end connected to a first input terminal and a second end (see figure 6, first inductor L1, first input terminal at TIP 21a, col.8, ln.7-10);

the second inductor having a first end connected to a second input terminal and a second end (see figure 6, second inductor L3, second input terminal at RING 21b, col.8, ln.16-18);

the first capacitor having a first end connected to the second end of the first inductor and having a second end connected to the second end of the second inductor (see figure 6, second end of first inductors L1 at node 51a, second end of second inductor L3 at node 51b, first capacitor C6);

an elliptical filter section formed of third and fourth inductors and second and third capacitors (see figure 6, third inductors L2, fourth inductor L4, second capacitors C3, fourth capacitor C4);

the third inductor and the second capacitor being connected in parallel and having their one end joined also to the second end of the first inductor and their other end joined to a first output terminal (see figure 6, third inductors L2, second capacitor C3, first output terminal at TIP 23a, col.8, ln.1-35);

the fourth inductor and the third capacitor being connected in parallel and having their one end joined also to the second end of the second inductor and their other end joined to a second output terminal (see figure 6, fourth inductors L4, third capacitors C4, second output terminal at RING 23b, col.8, ln.1-35);

first and second DSL terminals electrically coupled to respective one of the first and second input terminal (see figure 4, first and second input terminal at TIP/RING pair 16, first and second DSL terminal connect at TIP/RING pair 16, col.7, ln.32-36);

the first through fourth inductors and the first through third capacitors being housed in a modular adapter unit, the modular adapter unit including first, second and third modular jacks (see figure 4, figure 6, DPF 44, POTS filter 10, housing 45, col.7, ln.18-63);

the first modular jack being adapted for connection to the incoming telephone lines via the first and second input terminal (see figure 4, first modular jack 48, first and second input terminal at TIP/RING pair 16, col.7, ln.18-63);

the second modular jack being adapted for connection to the subscriber's termination equipment via the first and second output terminal (see figure 4, second jack 47, telephone 33, col.7, ln.18-63); and

the third modular jack being adapted for connection to the DSL device Via the first and second DSL terminals (see figure 4, third jack 49, DSL modem 41, col.7, ln.18-63).

Regarding claim 16, Bingel further teaches a low pass filter wherein the modular design is capable of self-installation by a subscriber (see col.7, ln.18-31).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bingel et al. (U.S. Patent No.: 6,028,919, hereinafter, "Bingel").

Regarding claims 11-12, Bingel teaches a unitized T1E1.4 compliant filter and splitter circuit used in telecommunication systems for interconnecting between incoming telephone lines and a subscriber's termination equipment located at a subscriber's premises for blocking DSL signals so as to mitigate interference between DSL devices and the subscriber's termination equipment, and communicate the DSL signals to a device capable of utilizing them, the compliant filter and splitter circuit comprising (see figure 4, POTS filter 10, DPF 44, col.4, ln.40-50, col.6, ln.43-53):

a low-pass filter section formed of first and second inductors and a first capacitor (see figure 6, low pass filter 12', first inductor L1, second inductor L2, first capacitor C6, col.6, ln.9-15);

the first inductor having a first end connected to a first input terminal and a second end (see figure 6, first inductor L1, first input terminal at TIP 21a, col.8, ln.7-10);

the second inductor having a first end connected to a second input terminal and a second end (see figure 6, second inductor L3, second input terminal at RING 21b, col.8, ln.16-18);

the first capacitor having a first end connected to the second end of the first inductor and having a second end connected to the second end of the second inductor (see figure 6, second end of first inductors L1 at node 51a, second end of second inductor L3 at node 51b, first capacitor C6);

an elliptical filter section formed of third and fourth inductors and second and third capacitors (see figure 6, third inductors L2, fourth inductor L4, second capacitors C3, fourth capacitor C4);

the third inductor and the second capacitor being connected in parallel and having their one end joined also to the second end of the first inductor and their other end joined to a first output terminal (see figure 6, third inductors L2, second capacitor C3, first output terminal at TIP 23a, col.8, ln.1-35);

the fourth inductor and the third capacitor being connected in parallel and having their one end joined also to the second end of the second inductor and their

other end joined to a second output terminal (see figure 6, fourth inductors L4, third capacitors C4, second output terminal at RING 23b, col.8, ln.1-35);

first and second DSL terminals electrically coupled to respective one of the first and second input terminal (see figure 4, first and second input terminal at TIP/RING pair 16, first and second DSL terminal connect at TIP/RING pair 16, col.7, ln.32-36);

the first through fourth inductors and the first through third capacitors being housed in a modular adapter unit, the modular adapter unit including first, second and third modular jacks (see figure 4, figure 6, DPF 44, POTS filter 10, housing 45, col.7, ln.18-63);

the first modular jack being adapted for connection to the incoming telephone lines via the first and second input terminal (see figure 4, first modular jack 48, first and second input terminal at TIP/RING pair 16, col.7, ln.18-63);

the second modular jack being adapted for connection to the subscriber's termination equipment via the first and second output terminal (see figure 4, second jack 47, telephone 33, col.7, ln.18-63); and

the third modular jack being adapted for connection to the DSL device Via the first and second DSL terminals (see figure 4, third jack 49, DSL modem 41, col.7, ln.18-63).

It should be noticed that Bingel fails to clearly teach the first through four inductors element having the values in the range of 4.3 mH to 4.7 mH. However, Bingle teaches the first through four inductors element L1-L4 are having the value of 8 mH, by changing the value of the inductive element L1-L4 to the range as claimed would not

involve any inventive feature since it is just a matter of selecting the value of the inductive element for a purpose of changing the value of the filter's characteristic of the particular frequency band.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the filter of Bingle by changing the value of the inductive element to the range of 4.3 mH to 4.7 mH in order to meet the filtering characteristic of the particular frequency band.

Regarding claims 13-14, Bingel teaches a unitized T1E1.4 compliant filter and splitter circuit used in telecommunication systems for interconnecting between incoming telephone lines and a subscriber's termination equipment located at a subscriber's premises for blocking DSL signals so as to mitigate interference between DSL devices and the subscriber's termination equipment, and communicate the DSL signals to a device capable of utilizing them, the compliant filter and splitter circuit comprising (see figure 4, POTS filter 10, DPF 44, col.4, ln.40-50, col.6, ln.43-53):

a low-pass filter section formed of first and second inductors and a first capacitor (see figure 6, low pass filter 12', first inductor L1, second inductor L2, first capacitor C6, col.6, ln.9-15);

the first inductor having a first end connected to a first input terminal and a second end (see figure 6, first inductor L1, first input terminal at TIP 21a, col.8, ln.7-10);

the second inductor having a first end connected to a second input terminal and a second end (see figure 6, second inductor L3, second input terminal at RING 21b, col.8, ln.16-18);

the first capacitor having a first end connected to the second end of the first inductor and having a second end connected to the second end of the second inductor (see figure 6, second end of first inductors L1 at node 51a, second end of second inductor L3 at node 51b, first capacitor C6);

an elliptical filter section formed of third and fourth inductors and second and third capacitors (see figure 6, third inductors L2, fourth inductor L4, second capacitors C3, fourth capacitor C4);

the third inductor and the second capacitor being connected in parallel and having their one end joined also to the second end of the first inductor and their other end joined to a first output terminal (see figure 6, third inductors L2, second capacitor C3, first output terminal at TIP 23a, col.8, ln.1-35);

the fourth inductor and the third capacitor being connected in parallel and having their one end joined also to the second end of the second inductor and their other end joined to a second output terminal (see figure 6, fourth inductors L4, third capacitors C4, second output terminal at RING 23b, col.8, ln.1-35);

first and second DSL terminals electrically coupled to respective one of the first and second input terminal (see figure 4, first and second input terminal at TIP/RING pair 16, first and second DSL terminal connect at TIP/RING pair 16, col.7, ln.32-36);

the first through fourth inductors and the first through third capacitors being housed in a modular adapter unit, the modular adapter unit including first, second and third modular jacks (see figure 4, figure 6, DPF 44, POTS filter 10, housing 45, col.7, ln.18-63);

the first modular jack being adapted for connection to the incoming telephone lines via the first and second input terminal (see figure 4, first modular jack 48, first and second input terminal at TIP/RING pair 16, col.7, ln.18-63);

the second modular jack being adapted for connection to the subscriber's termination equipment via the first and second output terminal (see figure 4, second jack 47, telephone 33, col.7, ln.18-63); and

the third modular jack being adapted for connection to the DSL device Via the first and second DSL terminals (see figure 4, third jack 49, DSL modem 41, col.7, ln.18-63).

It should be noticed that Bingle fails to clearly teach the capacitive element C1-C3 are having the values in the range of 10 nF. However, Bingle teaches the capacitive element C1-C3 having the value of 1 microF, by changing the value of the capacitive element C1-C3 to the range as claimed would not involve any inventive feature since it is just a matter of selecting the value of the capacitive element for a purpose of changing the value of the filter's characteristic of the particular frequency band.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the filter of Bingle by changing the value of the capacitive element to the range of 10 nF in order to meet the filtering characteristic of the particular frequency band.

8. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bingel et al. (U.S. Patent No.: 6,028,919, hereinafter, "Bingel") in view of Keenum et al. (Pub. No.: U.S. 2002/0044646, hereinafter, "Keenum").

Regarding claim 21, Bingel teaches a filter circuit used in telecommunication systems for adapting to substantially block DSL signals to the subscriber's termination equipment, the filter circuit comprising at least two similar filter sub-circuits each comprising at least (see figure 3, plurality of POTS filter 10, it is obvious to combine two filters in one adapter):

first and second inductors connected in series between a first input terminal and a first output terminal (see figure 6, first inductor L1, second inductor L2, first input terminal at TIP 21a, first output terminal at TIP 23a, col.8, ln.1-45);

the first inductor having its one end connected to the first input terminal and its other end connected to one end of the second inductor at a first common point, the second inductor having its other end connected to the first output terminal (see figure 6, first inductor L1, second inductor L2, first input terminal at TIP 21a, first output terminal at TIP 23a, common point 51a, col.8, ln.1-45);

third and fourth inductors connected in series between a second input terminal and a second output terminal (see figure 6, third inductor L3, fourth inductor L4, second input terminal at RING 21b, second output terminal RING 23b, col.8, ln.1-45);

the third inductor having its one end connected to the second input terminal and its other end connected to one end of the fourth inductor at a second common point, the fourth inductor having its other end connected to the second output terminal (see figure

6, third inductor L3, fourth inductor L4, second input terminal at RING 21b, second output terminal RING 23b, second common point 51b, col.8, ln.1-45);

the first capacitor having its one end connected to the first common point and its other end connected to the second common point (see figure 6, first capacitor C6, first common point 51a, second common point 51b, col.8, ln.29-35);

a second capacitor having its one end connected to the first common point and its other end connected to the first output terminal (see figure 6, second capacitor C3, first common point 51a, first output terminal at TIP 23a, col.8, ln.1-45); and

a third capacitor having its one end connected to the second common point and its other end connected to the second output terminal (see figure 6, third capacitor C4, second common point 51b, second output terminal at RING 23b, col.8, ln.1-45).

It should be noticed that Bingle fails to clearly teach two incoming telephone line. However, Keenum teaches such features (see col.4, [0032]) for a purpose of supporting different services.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of two incoming telephone line, as taught by Keenum, into view of Bingle in order to support a different services.

Regarding claim 22, Bingle further teaches the filter circuit further comprising a plurality of DSL terminals electrically coupled to respective ones of each of the input terminals associated with the at least two sub circuits (see figure 2, it is obvious the system of Bingle should support plurality of DSL terminal).

Regarding claim 23, Bingle further teaches the filter circuit is disposed substantially within a housing, the housing further comprising at least first, second and third modular jacks, the first jack being adapted to interface with the at least two incoming telephone line, the second jack being adapted to interface with the DSL terminal, and the third jack being adapted to interface with the terminal equipment (see figure 4, first jack 48, second jack 47, third jack 49, col.7, ln.18-36).

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bingel et al. (U.S. Patent No.: 6,028,919, hereinafter, "Bingel") in view of Ikola (Patent No.: 5,201,855).

Regarding claim 30, Bingel teaches a unitized T1E1.4 compliant filter and splitter circuit used in telecommunication systems for interconnecting between incoming telephone lines and a subscriber's termination equipment located at a subscriber's premises for blocking DSL signals so as to mitigate interference between DSL devices and the subscriber's termination equipment, and communicate the DSL signals to a device capable of utilizing them, the compliant filter and splitter circuit comprising (see figure 4, POTS filter 10, DPF 44, col.4, ln.40-50, col.6, ln.43-53):

a low-pass filter section formed of first and second inductors and a first capacitor (see figure 6, low pass filter 12', first inductor L1, second inductor L2, first capacitor C6, col.6, ln.9-15);

the first inductor having a first end connected to a first input terminal and a second end (see figure 6, first inductor L1, first input terminal at TIP 21a, col.8, ln.7-10);

the second inductor having a first end connected to a second input terminal and a second end (see figure 6, second inductor L3, second input terminal at RING 21b, col.8, ln.16-18);

the first capacitor having a first end connected to the second end of the first inductor and having a second end connected to the second end of the second inductor (see figure 6, second end of first inductors L1 at node 51a, second end of second inductor L3 at node 51b, first capacitor C6);

an elliptical filter section formed of third and fourth inductors and second and third capacitors (see figure 6, third inductors L2, fourth inductor L4, second capacitors C3, fourth capacitor C4);

the third inductor and the second capacitor being connected in parallel and having their one end joined also to the second end of the first inductor and their other end joined to a first output terminal (see figure 6, third inductors L2, second capacitor C3, first output terminal at TIP 23a, col.8, ln.1-35);

the fourth inductor and the third capacitor being connected in parallel and having their one end joined also to the second end of the second inductor and their other end joined to a second output terminal (see figure 6, fourth inductors L4, third capacitors C4, second output terminal at RING 23b, col.8, ln.1-35);

first and second DSL terminals electrically coupled to respective one of the first and second input terminal (see figure 4, first and second input terminal at TIP/RING pair 16, first and second DSL terminal connect at TIP/RING pair 16, col.7, ln.32-36);

the first through fourth inductors and the first through third capacitors being housed in a modular adapter unit, the modular adapter unit including first, second and third modular jacks (see figure 4, figure 6, DPF 44, POTS filter 10, housing 45, col.7, ln.18-63);

the first modular jack being adapted for connection to the incoming telephone lines via the first and second input terminal (see figure 4, first modular jack 48, first and second input terminal at TIP/RING pair 16, col.7, ln.18-63);

the second modular jack being adapted for connection to the subscriber's termination equipment via the first and second output terminal (see figure 4, second jack 47, telephone 33, col.7, ln.18-63); and

the third modular jack being adapted for connection to the DSL device Via the first and second DSL terminals (see figure 4, third jack 49, DSL modem 41, col.7, ln.18-63).

It should be noticed that Bingle fails to clearly teach ferrite sleeve adapted to shield the inductor. However, Ikola teaches such features (see col.9, ln.45-68) for a purpose of reducing the interference.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of ferrite sleeve adapted to shield the inductor, as taught by Ikola, into view of Bingle in order to reduce the interference.

10. Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bingel et al. (U.S. Patent No.: 6,028,919, hereinafter, "Bingel") in view of Keenum et al.

(Pub. No.: U.S. 2002/0044646, hereinafter, "Keenum") as applied to claim 21 above, and further in view of Ikola (Patent No.: 5,201,855).

Regarding claims 24, 25, and 27, Bingle and Keenum, in combination, fails to clearly teach ferrite sleeves adapted to shield the inductor. However, Ikola teaches such features (see col.9, ln.45-68) for a purpose of reducing the interference.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of ferrite sleeve adapted to shield the inductor, as taught by Ikola, into view of Bingle and Keenum in order to reduce the interference.

Regarding claims 26 and 28, Ikola further teaches the filter circuit comprising a common substrate having at least first and second ends, the at least two sub circuit being mounted on the substrate, the first and third inductor of each of the sub circuits being disposed proximate the first and second end, respectively, so as to reduce cross talk therebetween (see col.4, ln.35-68, col.5, ln.1-34).

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this final action should be mailed to:

Box AF

**Commissioner of Patents and Trademarks
Washington, D.C. 20231**

or faxed to:

**(703) 872-9314 (for formal communications; please mark
"EXPEDITED PROCEDURE")**

Or:

**If it is an informal or draft communication, please label
"PROPOSED" or "DRAFT")**

Customer Service (703) 306-0377

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist)

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Bell (U.S. Patent No. 5,930,340), and Scholtz et al. (U.S. Patent No. 6,301,337 are not applied into this Office Action; they are also called to Applicants attention. They may be used in future Office Action(s). These references are also concerned for supporting the system and method for isolating voice and data signals on a common carrier.

Art Unit: 2643

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (703) 305-4987. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (703) 305-4708 and

IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2643
December 12, 2004
Examiner

Tuan Pham


CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600